sun hydraulics	Cylinders - Lifting/Lowering, Single-Acting (2)		
	Machine:	Actuator: Cylinder	Function: Lift

## Prepared for :

Prepared by :

# **Schematics**



# **Related Products**

#### Cartridges

DTCA - 2-way, direct-acting, solenoid-operated directional blocking poppet valve with overlap FPFK - Pilot-operated, normally closed, electroproportional throttle with reverse flow check FPCC - Electro-proportional flow control valve normally closed

DFCA - 2-way, 2-stage, solenoid-operated directional poppet valve - flow 1-2 DMDA - 3-way, solenoid-operated directional

spool valve DKDC - Normally closed, balanced poppet,

logic element - pilot-to-open

## Summary



The example shows circuits with proportional valves for lifting and lowering a single-acting cylinder.

- 2-way, solenoid-operated poppet valve: •
- Pilot-operated proportional throttle: FP\*K • FP\*C
- Proportional flow control : •
- 2 stage solenoid-operated poppet valve: •
  - 3-way solenoid-operated directional valve: DM\*A DK\*C
- Logic valve:

Benefits of this circuit arrangement

• Fig.1 shows two 2/2 way solenoid valves DT\*A to hold, lift or lower a cylinder. A proportional throttle valve FP\*C (0- 10 gpm) controls the lifting or lowering speeds of the cylinder.

DT\*A

DF\*A

- Fig. 2 has the same functionality as the above, but for higher flow rates. The logic valve DK\*C (piloted by a 2/3 way DM\*A) and a 2/2 way solenoid poppet valve DF\*A hold, lift or lower the cylinder.
- The pilot operated proportional throttle valve FP\*K with a flow rate of 0 60 gpm (@ 200 psi 200 psi P) ٠ controls the lifting or lowering speeds of the cylinder.